

## REMARKS

In the outstanding Office Action, claims 12, 17 and 18 stand rejected as being unpatentable over Sarnecki, U.S. Patent Application Publication No. 2003/0089252, hereafter '252, in view of Towns et al., U.S. Patent No. 6,153,711, hereafter '711, and Park et al., U.S. Patent No. 5,053,298, hereafter '298.

In "Response to Argument" of the Action, column 1, lines 32-34 of '711 is referred to by the Examiner stating that the '711 reference teaches that suitable coating techniques can be reverse roll coating, meniscus coating, and contact/transfer coating. However, these coating techniques are listed in '711 as examples of conventional coating techniques, i.e. those using high viscosity inks. These coating techniques are not disclosed as preferable techniques requiring and/or utilizing low viscosity inks ranging from 1 cP to 200 cP. The ink viscosity of the '711 reference ranges from 1 cP to 200 cP enabling a thin film to be formed by the ink jet method with a desirable thickness of said film which cannot be formed with conventional high viscosity inks. To achieve the viscosity, it was necessary that a method for adjusting the viscosity of the ink be disclosed and taught in the '711 reference.

It is noted that the '711 reference is incorporated in '252 by reference. However, the method for adjusting ink viscosity of '711 is incorporated in '252 (paragraph [0020], lines 16-18), not the ink viscosity range of '711. In '252, "Gravure inks are of intermediate viscosity". For this reason, gravure inks are "easier to formulate and handle". (paragraph [0011])

For the reasons described above, even though '252 and '711 are combined, the invention, that low viscosity ink of 0.5 cP or more and 500 cP or less is used in the intaglio printing, is

submitted not to be obvious to those skilled in the art in view of the distinguishing commentary provided above.

The present invention is distinguished in that the low viscosity ink of 0.5 cP or more and 500 cP or less, which is not usually used in the intaglio printing, is used in the present invention. Therefore, a desirable thin even film can be obtained by adjusting wetting and spreading of the ink of the above-described low viscosity. The advantageous effect of the present invention can be obtained only when the low viscosity ink of 0.5 cP or more and 500 cP or less is used.

The significance of the ranges as mentioned above can be understood from Examples 1-3 and Comparative Examples 1-2 in the present specification. The inks used in these Example and Comparative Examples are prepared by dissolving the same polymer fluorescent substance in the same solvent so that only the viscosities thereof differ. In Examples 1-3, in which viscosity of inks used were within the above range, films with 100 nm thickness were able to be formed. On the other hand, in Comparative Example 1, in which the ink viscosity was below 0.5 cP, an even film could not be obtained due to the fact of the lack of a sufficient amount of polymer fluorescent substance. Further, in Comparative Example 2, in which the ink viscosity was over 500 cP, an even film could not be obtained because the ink did not wet and spread evenly.

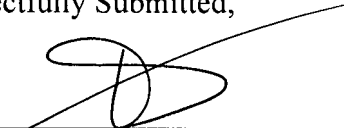
In the present invention, Applicant asserts that both novelty and inventive height (non-obviousness) are established by using a low viscosity ink of 0.5 cP or more and 500 cP or less, noting that inks with such properties are not known to be used in the intaglio printing of the present invention. Therefore, it is submitted that the present invention cannot be derived from a combination of the '252 reference which merely disclosed formation of an electroluminescent

device by the intaglio printing; and the '711 reference which discloses the ink viscosity range in the printing methods other than the intaglio printing. The advantageous and peculiar characteristics disclosed by Applicant and set forth in the claims is not disclosed in any of the references alone or in combination. These references, furthermore, do not contemplate, disclose or teach the effects Applicant has surprisingly disclosed with the above-mentioned characteristics.

Applicant asserts that the claimed invention is patentable over the prior art of record and requests favorable reconsideration.

Respectfully Submitted,

Date: 4/11/07

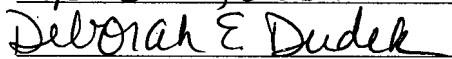
  
\_\_\_\_\_  
Timothy J. Keefer, Reg. No. 35,567

SEYFARTH SHAW LLP  
131 S. Dearborn Street  
Suite 2400  
Chicago, Illinois 60603-5577  
Telephone: (312) 460-5000  
Facsimile: (312) 460-7000

**CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Mail Stop: Fee Amendment

Date: April 11, 2007



Deborah E. Dudek